

I PW

Docket No.: 30610/40001

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Striepeke et al.

Application No.: 10/828,780

Filed: April 21, 2004

,

For: A DEVICE AND METHOD FOR

MEASURING GLYCOSAMINOGLYCANS

IN BODY FLUIDS

Examiner: Not Yet Assigned

Art Unit: 1623

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO - 1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

All patents and publications in the attached Form PTO - 1449 are supplied herewith, with the exception of the U.S. Patent Documents in accordance with the waiver of the requirement under 37 CFR 1.98 (a)(2)(i). It is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for the instant application under any section of 35 U.S.C. §102 or 35 U.S.C. §103.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. It is submitted that the Information

A

Application No.: 10/828,780 Docket No.: 30610/40001

Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

No fees are believed to be necessary, however, the Commissioner is hereby authorized to charge any deficiency in the fees filed or credit any overpayments to our Deposit Account No. 13-2855. A duplicate copy of this paper is enclosed.

Dated: November 4, 2004

Respectfully submitted

By: Nabeela R. McMillian

Registration No.: 43,363

MARSHALL, GERSTEIN & BORUN LLP

233 S. Wacker Drive, Suite 6300

Sears Tower

Chicago, Illinois 60606-6357

(312) 474-6300

Attorney for Applicants

		SHEET 1 01
Form PTO-1449 (Modified)	Atty. Docket No.	Serial No.
	30610/40001	10/828,780
TATE OF A TRANSPORT	Applicant(s)	
INFORMATION DISCLOSURE STATEMENT	Striepeke et al.	
	Filing Date	Art Unit
MUN 0 8 2004 00	August 21, 2004	1623

	ENT & TRA	DEMARK	U.S. PA	ATENT DOCUM	ENTS		
Examiner Initials		Document Number	Issue or Publication Date	Name	Class	Subclass	Filing Date (If Appropriate)
	A1	4,468,465	08/28/1984	Sato	436	64	
	A2	4,543,335	09/24/1985	Sommer et al.	436	69	- 10 -
	A3	4,911,549	03/27/1990	Karkar	356	39	
	A4	4,975,165	12/04/1990	Brandley	204	182.1	
-	A5	5,019,231	05/28/1991	Brandley	204	182.1	
· · · · · · · · · · · · · · · · · · ·	A6	5,035,786	07/30/1991	Brandley et al.	204	182.1	
	A7	5,087,337	02/11/1992	Brandley et al.	204	182.1	_
	A8	5,104,508	04/14/1992	Williams et al.	204	182.8	
	A9	5,185,245	02/09/1993	Heimer	435	7.1	
	A10	5,205,917	04/27/1993	Klock, Jr.	204	182.8	
	A11	5,236,570	08/17/1993	Ma et al.	204	418	•
	A12	5,310,646	05/10/1994	Whitley	435	4	• ,
	A13	5,316,638	05/31/1994	Jackson	204	182.8	
ı İ	A14	5,340,453	08/23/1994	Jackson	204	182.8	
	A15	5,453,171	09/26/1995	Ma et al.	204	418	
	A16	5,472,582	12/05/1995	Jackson	204	180.1	
	A17	6,228,598	05/08/2001	Pestronk	435	7.1	
	A18	6,291,439	09/18/2001	Klock	514	56	
	A19	6,630,295	10/07/2003	Mayer et al.	435	4	

Examiner	Document	Publication	Country	Translation
Initials	Number	Date		Yes N
-			TO	

EXAMINER:	DATE CONSIDERED:

Form PTO-1449 (Modified)	Atty. Docket No.	Serial No.
	30610/40001	10/828,780
INFORMATION DISCLOSURE STATEMENT	Applicant(s)	
	Striepeke et al.	
	Filing Date	Art Unit
	August 21, 2004	1623

	OTHER DOCUMENTS
C1	BAICI et al., Analysis of glycosaminoglycans in human serum after oral administration of chondroitin sulfate, <i>Rheumato</i> . <i>Int.</i> 12:81-88, 1992.
 C2	BHAVANANDAN et al., Quantitation of urinary glycosaminoglycans with Alcian blue: evaluation of the interference by Tamm-Horsfall glycoprotein <i>Clinica</i> . <i>Chimica</i> . <i>Acta</i> . 251:207-214, 1996.
C3	BJÖRNSSON, Dose-Dependent Decrease in Heparin Elimination, J. Pharm. Sci. 71(10):1186-1188, October 1982.
C4	BJÖRNSSON, Simultaneous Preparation and Quantitation of Proteoglycans by Precipitation with Alcian Blue, <i>Analytical Biochemistry</i> 210:282-291, 1993.
C5	Blyscan™ Glycosaminoglycan Assay, http://www.biocolor.co.uk/blyscan.asp.
 C6	CASU, Structure of Heparin and Heparin Fragments, Annals NY. Acad. Sci. 556:1-17, 1989.
C7	CIPOLLE et al., Heparin, Applied pharmacokinetics: principles of therapeutic drug monitoring, 30:1-39, 8th ed., Applied Therapeutics, Vancouver, WA 1992.
C8	DE JONG et al., Dimethylmethylene Blue-Based Spectrophotometry of Glycosaminoglycans in Untreated Urine: a Rapid Screening Procedure for Mucopolysaccharidoses, <i>Clin. Chem.</i> 35(7):1472-1477, 1989.
С9	DE LA CRUZ AMORÓS et al., Urinary Excretion of Mucopolysccharides in Pediatric and Adolescent Patients, <i>Analales Espanoles de Pediatria</i> 50(4):361-366, 1999.
C10	DEMBURE et al., Screening for Mucopolysaccharidoses by Analysis of Urinary Glycosaminoglycans, <i>Techniques in Diagnostic Human Biochemical Genetics</i> 77-86, 1991.
C11	DENNY et al., Simple Urine Test for Gargoylism, Br. Med. J. 1555-6, June, 1962.
C12	ENOBAKHARE, et al. Quantification of Sulfated Glycosaminoglycans in Chondrocyte/Alginate Cultures, by Use of 1,9-Dimethylmethylene Blue, <i>Anal. Biochem.</i> 243:189-191, July, 1996.
C13	FAREED, et al., Modulation of Endothelium by Heparin and Related Polyelectrolytes, <i>Clin. Appl. Thrombosis/Hemostatis</i> 2(3):200-208, 1996.
C14	FARNDALE, et al., Improved quantitation and discrimination of sulphated glycosaminoglycans by use of dimethylmethylene blue, <i>Biochimica et Biophysica Acta</i> 883:173-177, 1986.
C15	HIRSCH, Heparin, New Engl. J. Med. 324(22):1565-74, May 1991.
 C16	JIAO et al., Mechanism of Interference and Azur A Response in the Heparin Assay, Analythical Letters, 31(8):1311-1323, 1998.
C17	KANDROTAS, Heparin Pharmacokinetics and Pharmacodynamics, <i>Clin. Pharmacokin.</i> 22(5):359-74, 1992.
 C18	KOSHIISHI, Quantitative and qualitative alterations of chondroitin/dermatan sulfates accompanied with development of tubulointerstitial nephritis, <i>Arch. Biochem Biophys.</i> 401:38 43, 2002.

DATE CONSIDERED:

SHEET 3 of 3

		OLLDDI JULJ
Form PTO-1449 (Modified)	Atty. Docket No. 30610/40001	Serial No. 10/828,780
INFORMATION DISCLOSURE STATEMENT	Applicant(s) Striepeke et al.	
	Filing Date August 21, 2004	Art Unit 1623

	OTHER DOCUMENTS
 C19	MAJERUS et al., Anticoagulant, Thrombolytic, and Antiplatelet Drugs, <i>The Pharmacological Basis of Therapeutics</i> 9 th Ed., Hardman et al. eds, McGraw Hill, 1996.
C20	MIELKE et al., Rapid Biochemical Measurement of Heparin in Whole Blood During Open Heart Surgery and Cardiopulmonary Bypass, <i>Blood</i> 94(10), November, 1999.
C21	PENNOCK, A review and selection of simple laboratory methods used for the study of glycosaminoglycan excretion and the diagnosis of the mucopolysaccharidoses, <i>J. Clin. Path.</i> 29:111-123, 1976.
C22	SATAKE et al., Enzymatic Determination of Urinary Glycosaminoglycans from Orthopedic Patients, <i>Tohoku J. Exp. Med.</i> , 140:89-86, 1983.
C23	STARR et al., Fluorophore-assisted electrophoresis of urinary carbohydrates for the identification of patients with oligosaccharidosis- and mucopolysaccharidosis-type Iysosoma storage diseases, <i>Glycosylation & Disease</i> 1(3):165-176.
C24	STONE et al., Aggregation of Cationic Dyes on Acid Polysaccharides, <i>Biochim. Biophys. Acta.</i> 148:172-192, 1967.
C25	STONE, Optical conformation of heparin and heparin complexes with cationic dyes, amines and protein models, <i>Fed. Proc.</i> , 36(1):101-106, January, 1977.
C26	TAYLOR et al., A new basic metachromatic dye, I:9-Dimethyl Methylene Blue, <i>Histoch. J.</i> I:199-204, 1969.
C27	TODOROVA et al., Urinary Excretion of Glycosaminoglycans in Patients with Postmenopausal Osteoporosis, <i>Horm Metab Res</i> .24:585-587, 1992.
 C28	VACHVANICHSANONG et al., Childhood Idiopathic Hypercalciuria, <i>Int. Pediatr.</i> 9(1):40-48, 1994.
C29	WHITLEY et al., Diagnostic Test for Mucopolysaccharidosis. I. Direct Method for Quantifying Excessive Urinary Glycosaminoglycan Excretion, <i>Clin. Chem.</i> 35(3):374-379, 1989.
C30	WHITLEY et al., Urinary Glycosaminoglycan Excretion Quantified by an Automated Semimicro Method in Specimens Conveniently Transported from Around the Globe, <i>Mol. Genetics and Metabolism</i> 75:56-64, 2002.
C31	YEN et al., The structure of heparin: Interaction of heparin with basic dyes by visible spectrometry, <i>Biochem. Biophys. Acta.</i> 184:646-648, 1969.

EXAMINER:	DATE CONCIDEDED.
EAAMINER.	DATE CONSIDERED: